



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,002	04/25/2001	Yuji Kishida	81870.0018	7882

26021 7590 06/27/2003

HOGAN & HARTSON L.L.P.
500 S. GRAND AVENUE
SUITE 1900
LOS ANGELES, CA 90071-2611

EXAMINER

ULLAH, AKM E

ART UNIT PAPER NUMBER

2874

DATE MAILED: 06/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/843,002

Applicant(s)

KISHIDA ET AL.

Examiner

Akm Enayet Ullah

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 10 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☒ Claim(s) 11 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Detailed Action

Applicant cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Status of the Application

Claims 1-19 are pending in this application

Claims 1-19 are rejected under 35 USC 112 and 103 and also claims 11 and 19 are mentioned allowable subject matter.

If applicant is aware of any prior art or any other co- pending application not already of record, he/she is reminded of his/her duty under 37 CFR 1.56 to disclose the same.

Drawings

This application has been filed on April 24, 2001 with informal drawings, which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Claimed Foreign Priority- Paper Filed

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Title of the Invention is Not Descriptive

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Abstract of the Disclosure: Content

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

Abstract of the Disclosure: Language

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Rejection 35 USC 112, 2nd Paragraph

Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999).

The term "optical semiconductor device", "a device mounting face" in claim 1 is used by the claim to mean, "having a mounting face", while the accepted meaning is "a mounting structure." The term is indefinite because the specification does not clearly redefine the term.

Although, it may define in the body of the specification it is noted that the claim language as it claimed throughout the claims are not clear. Thus, it fails to give a proper understanding to the claim how & what formed and where, what and how mounting face corresponds.

The recitation of claim 3, lines 2-3, which will be used for positioning the carrier on another substrate is formed on the positioning face". It fails to give understating to the claim how many substrate applicant is referring to.

In claim 4, the recitations ----- "the device mounting face corresponds to surface or surface equivalent to surface or surface of a single crystalline silicon and the positioning face corresponds to surface equivalent to surface of the single crystalline silicon" This type of claim language is vague and indefinite because it fails to give understanding to the claim what surface or surface equivalent surface exactly applicant referring to. Thus this type of claim language in any claim is vague and indefinite.

The recitation of claim 12, line 2 -----"having the above-mentioned configurations" is vague and indefinite. What constitutes the above-mentioned configurations?

Note that the above informalities are representative of all of the informalities present in the claims. Applicant should correct all of the informalities present in the claims.

35 USC 102 Rejections

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

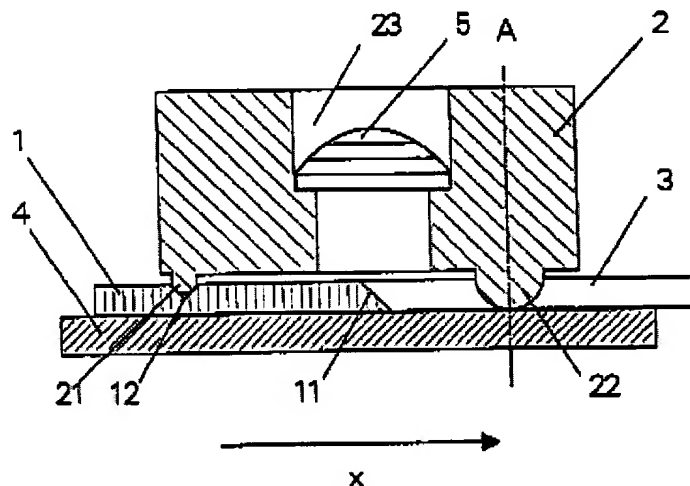
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Mehlhorn et al disclose a circuit carrier includes at least one optical layer having two sides, at least one surface mountable electro-optical component disposed at least one of the sides where electro-optical component having at least one optical connection and electrical connections and electro-optical component device being mounted and at least one positioning face slanted by a predetermined angle with respect to the device mounting device.

For details see columns 3 & 4 of the reference. The above mentioned clearly anticipated the instant invention as claims in claims 1-3 and 5.

Claims 1 -3 and 5 are also rejected under 35 U.S.C. 102(b) as being anticipated by Moisel (USPNO. 6,236,788 B1).

FIG. 2



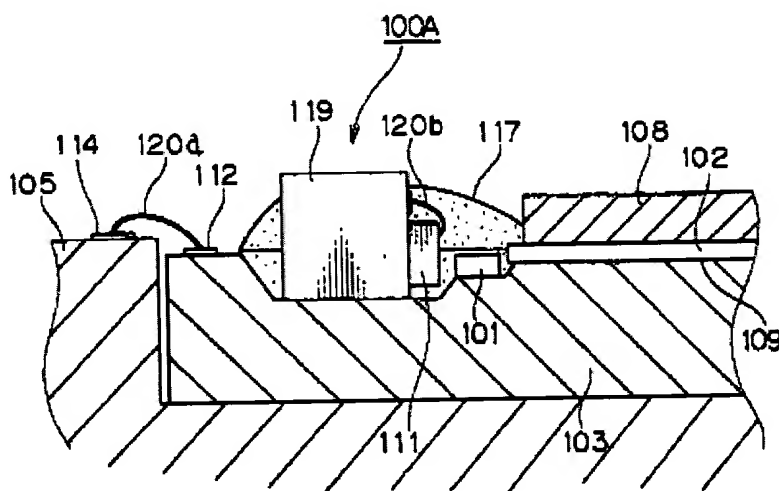
Moisel disclose an arrangement for coupling light into and coupling light out of a waveguide comprising a base plate, a mirror mount and reflecting surface positioned to the base plate and at least one waveguide and a holding device for holding optical or optoelectronic components mounted on the base plate. Not that the optical or optoelectronic components comprises one of the lenses, laser diodes, photodiodes and glass fiber connectors and the base plate comprises one of a semiconductor material, a ceramic material and a printed circuit board.

For details see figure 2 and the columns 3-4.

Claims 1 -3 and 5 are also rejected under 35 U.S.C. 102(b) as being anticipated by Setoguchi (USPNO. 6,467,972 B2).

Figure 7 describes the instant invention as claimed in claim 1-3 and 5.

FIG. 7



Claim Rejections - 35 USC § 103

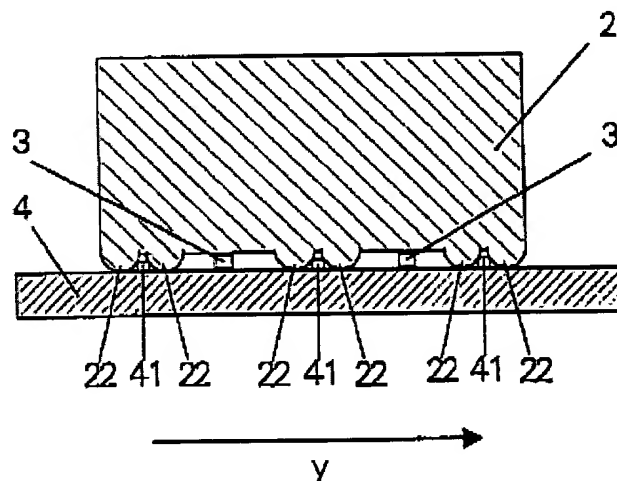
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 4,6-10 and 12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman (USPNO. 4,963,906).

FIG. 3



Setoguchi disclose an optical interconnection module and mounting structure thereof by which an optical fiber and an optical semiconductor device can precisely be interconnected to realize a reliable interconnection in a long term.

Art Unit: 2874

The module comprises a first mounting base member and a second mounting base member. At least an optical semiconductor device and an optical fiber interconnected to optical semiconductor device are held on the first mounting base member. The first mounting base member with the optical semiconductor device and the optical fiber is further fixed on the second mounting base member

Regarding claims 4 and 17, a surface of single crystalline silicon and the positioning face corresponds to surface equivalent to surface of the single crystalline silicon, which is mentioned in column 11 of the reference (third paragraph).

Note that the use of electrode in this type of device is an inherent of the reference. For details see column 17-18 of the reference.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize such optical module system which would provide a high productivity, downsized and splendid high frequency characteristic wherein optical semiconductor device mounted on the carrier can be optically coupled with the optical fiber mounted on the substrate.

Allowable Subject Matter

Claims 11 and 19 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Cited Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hashizume et al (USPNO. 6,130,444), Yamabayashi et al (USPNO. 6,575,641 B2) and Chakravorty et al (USPNO.6, 512,861) are also cited to show a typical optical module where the interconnection between an optical semiconductor and optical fiber and a mounting structure respectively.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akm Enayet Ullah whose telephone number is 703-308-4885. The examiner can normally be reached on Mon.- Thurs. 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on 703-3084819. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7721 for regular communications and 703-308-7721 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Application/Control Number: 09/843,002
Art Unit: 2874

Page 12



Akm Enayet Ullah
Primary Examiner
Art Unit 2874

AUllah
June 23,2003